Universal Design for Instruction

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# Loyola University: Committed to an Inclusive Learning and work Environment

Loyola University Maryland values its increasingly diverse student body and workforce. In order to effectively serve the changing consumers in higher education, it has been necessary to develop a framework to look at development of instructional and assessment materials, as well as looking at methods of delivering instruction.

## Universal Design for Instruction (UDI)

As the world continues to recognize and appreciate the value of differences, the collegiate student body also continues to be more diverse in background, culture, age, race, orientation, disability, primary language, and ability. The principles for high education described here were built on the ideals of Universal Design (UD) for architecture and the Universal Design for Learning (UDL) from the Center for Applied Special Technology, which were adapted from the K-12 environment. This following nine (9) principle framework was developed by the University of Connecticut as part of a grant from the US Department of Education. The 9 principles of UDI, “…operates on the premise that the planning and delivery of instruction as well as the evaluation of learning can incorporate inclusive attributes that embrace diversity in learners without compromising academic standards.”

## The 9 principles of Universal Design for Instruction identified by University of Connecticut (Scott, Shaw and McGuire) are:

1. Equitable use

Information and materials can be used seamlessly by a larger more diverse group of students. This

means identical materials “whenever possible, equivalent when not.” For example, digital text is saved in

format that is accessible to a variety of text to speech software and links to background information is

accessible to all students in course.

2. Flexibility in use

Choice is key here. If a student needs to hear the materials provided they can, with the same materials, be able to print out and use for physical manipulation or materials should be able to be visually adjusted for font size and contrast for the visually impaired student. Instructors should provide different methods of instructional delivery, so that instructional methods and approaches are varied allowing students to experience the same material in a variety of ways.

3. Simple and intuitive

The content is the focus of learning – not how to work one’s way through the material. The use of a grading rubric is a must for this principle.

4. Perceptible information

Information is presented to students in an accessible manner (for example, when referring to a graphic, it is described or alt tags are used for students with visual impairments; captioning provided for

students with hearing impairments; and all reading materials are provided in an accessible digital

format).

5. Tolerance for error

Professors need to understand that students come with different levels of experience and resources, resulting in variation of proficiency. Instructors should provide the opportunity for students to turn in

components of a larger project for feedback and improvement.

6. Low physical effort

When physical effort is not a central part of the course, a low amount of physical effort should be required in order to “maximize attention to learning” thus cutting down on transitions which can

interfere in learning for some students.

7. Size and space for approach and use

Consider the needs of the students within the space allotted. Also, accounting for variation in

student’s body size, posture, mobility, and communication needs.

8. A community of learners

Create an environment (both physical and online) that feels safe and encourages interactions between students, as well as between the students and instructor.

9. Instructional climate

An environment is engineered to be welcoming, inclusive of all learners and communicating high

expectations of performance for all students. Instructors can start this process both in the syllabus

with the statement of expectations of respect for differences and diversity as well as statement

encouraging students to self-disclose documented or suspected learning difficulties.

### Cited Works:

Scott, S., Shaw, S., & McGuire, J. (in press). Universal Design for Instruction: A new

paradigm for adult instruction in postsecondary education. *Remedial and Special Education.*

Shaw, S., Scott, S., & McGuire, J. (2001). Teaching college students with

learning disabilities. ERIC Digest #e618 . Arlington , VA : Council for Exceptional Children .

# Universal Design Resources

The concepts of Universal Design (UD), Universal Design for Learning (UDL), and Universal Design for Instruction (UDI) are being implemented, researched, and studied throughout the United States and the world. There are numerous electronic and print resources to help university personnel learn about UD. Also, there are many resources to help university professionals to begin utilizing the practices of UDI in the classroom environment. The following resources provide a good start to anyone interested in learning more about UDI.

## Online Tutorials

Equity and Excellence in Higher Education – [Universally Designing a Syllabus](http://media.umb.edu/syllabustutorial/) is a tutorial on the Universal Course Design website. There are also tutorials on many topics regarding [universal course design](http://eeonline.org/ucd-tutorials?task=view) (such as, creating accessible documents and Excel files; captioning; podcasting; and concept maps).

The University of Northern Colorado – offers an excellent online [tutorial](http://www.unco.edu/CETL/UDL/) in UDL. There are many sidetracks to pursue, if you have the time and inclination.

## Multimedia Resources

DO-IT offers a [13-minute video](http://www.washington.edu/doit/Video/ea_udi.html) which presents the rationale for UDL and a variety of ways to create universally designed educational experiences in higher education. The accompanying publication provides details and resources. The presentation is open-captioned and audio-described.

EnACT has a [slideshow](http://connect.csumb.edu/udl1) (24 min.) with synchronized audio introducing the principles of UDL and examples of UDL in postsecondary practice.

Equity and Excellence in Higher Education Universal Course Design project has a [slide presentation](http://eeonline.org/ucd-examples?task=view) (14.5 min.) with accompanying audio provides examples of universal course design from instructors at the five Boston-area colleges that participated in the Equity and Excellence in Higher Education Universal Course Design project. Requires Adobe Flash Player.

Merlot Elixir Initiative offers eight informative [video case stories](http://elixr.merlot.org/case-stories/understanding--meeting-students-needs/universal-design-for-learning-udl?noCache=920:1306947204) by faculty in a range of disciplines who incorporate specific universally designed features in their courses. Case stories are closed-captioned and have accompanying transcripts.

## Websites and Tools for Faculty

[CAST](http://www.cast.org/udl/index.html) (Center for Applied Special Technology) Although it is not specifically directed to the postsecondary context, much of what this site has is relevant to design of courses.

[DO-IT](http://www.washington.edu/doit/) (Disabilities, Opportunities, Internetworking, and Technology). This University of Washington program offers probably the single most useful site you will find for UD in education resources. It gives you access to the following relevant sites:

[Center for Universal Design in Education](http://www.washington.edu/doit/CUDE/)  a 13-minute [video](http://www.washington.edu/doit/Video/ea_udi.html) presents the rationale for UDL and a variety of ways to create universally designed educational experiences in higher education. The accompanying publication provides details and resources. The presentation is open-captioned and audio-described.

[The Faculty Room](http://www.washington.edu/doit/Faculty/Strategies/Disability/) provides descriptions, case studies, FAQ’s, and resources related to specific categories of disability.

[AccessComputing](http://www.washington.edu/accesscomputing/)

[AccessIT](http://www.washington.edu/accessit/faqs.html) (Information Technology)

[AccessDL](http://www.washington.edu/doit/Resources/accessdl.html) (accessibility in distance learning)

[AccessSTEM](http://www.washington.edu/doit/Stem/)

[STEM resources](http://www.washington.edu/doit/Resources/sem.html)

[Technology and Universal Design](http://www.washington.edu/doit/Resources/technology.html)

[DO-IT publications and training materials](http://www.washington.edu/doit/Brochures/).

DO-IT also offers a variety of free online publications on universal design and accessibility, including: [Equal Access: Universal Design of Instruction](http://www.washington.edu/doit/Brochures/Academics/equal_access_udi.html) (a checklist for inclusive teaching) and [Universal Design in Education: Principles and Applications](http://www.washington.edu/doit/Brochures/Academics/ud_edu.html).

National Center on Universal Design for Learning has an [interactive list](http://www.udlcenter.org/aboutudl/udlguidelines) of UDL guidelines, examples, and resources and [UDL examples and resources](http://www.udlcenter.org/implementation/examples).

University of Connecticut access [FacultyWare](http://www.facultyware.uconn.edu/home.cfm) to get UDI information and downloadable tools.

[UDI Online](http://udi.uconn.edu/), a project of Universal Design for Instruction in Postsecondary Education at the University of Connecticut. “Diverse Learners” The [e-toolbox sections](http://udi.uconn.edu/index.php?q=content/e-toolbox) has realistic scenarios in which diverse student needs and challenges call for variations on conventional teaching, communication, and assessment strategies. Each scenario is followed by suggestions for e-tools that could address the challenge in question. This site offers no-cost/low-cost e-tools (teaching techniques, resources, and materials) that individual instructors can use to create learning environments that are responsive to the diversity of students in their courses. The emphasis is on tools that don’t require specialized technical knowledge or IT support.

University of Guelph Teaching Support Services. This page has links to two very useful [handbooks](http://www.tss.uoguelph.ca/projects/uid/), one for classroom-based course, and one for distance learning. These contain detailed checklists for a wide range of issues in course design, teaching, and assessment. You may also subscribe to a listserv for discussion of UDL design from this webpage.

## Online Books

Jeanne L. Higbee, ed. [Curriculum Transformation and Disability: Implementing Universal Design in Higher Education](http://www.cehd.umn.edu/CRDEUL/books-ctad.html). Center for Research on Developmental Education and Urban Literacy, 2003.

Rose, D. and A. Meyer. [Teaching Every Student in the Digital Age: Universal Design for Learning.](http://www.cast.org/teachingeverystudent/ideas/tes/) (Alexandria, VA: ASCD, 2002).

## Articles and Print Books

Burgstahler, Sheryl. “Lessons Learned in the Faculty Room,” *Journal on Excellence in College Teaching* 18.3 (2007).

Burgstahler, Sheryl and Rebecca Corey. *Universal Design in Higher Education: From Principles to Practice*. Harvard Education Press, 2008.  [TU library](http://diamond.temple.edu/) call number: LC4820 .B874 2008.

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Johnson, Julie R. “Universal Instructional Design and Critical (Communication) Pedagogy: Strategies for Voice, Inclusion, and Social Justice/Change,” *Equity and Excellence in Education* 37.2 (2004): 145-53.

Kame’enui, E.J., et al. *Effective Teaching Strategies that Accommodate Diverse Learners.* 2nd ed. Upper Saddle River, NJ: Pearson Prentice Hall, 2002. [TU library](http://diamond.temple.edu/) call number: LB1025.3.E36.

McGuire, J.M., Sally Scott, and Stan Shaw. “Universal Design for Instruction: The paradigm, its principles, and products for enhancing instructional access,” *Journal of Postsecondary Education and Disability* 17.1 (2003): 11-21.

Mino, J. “Planning for Inclusion: using universal instructional design to create a learner-centered community college classroom,” *Equity and Excellence in Education* 37.2 (2004): 154-60.

Ouellett, M.L. “Faculty development and universal instructional design,” *Equity and Excellence in Education* 37 (2004): 135-44.

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